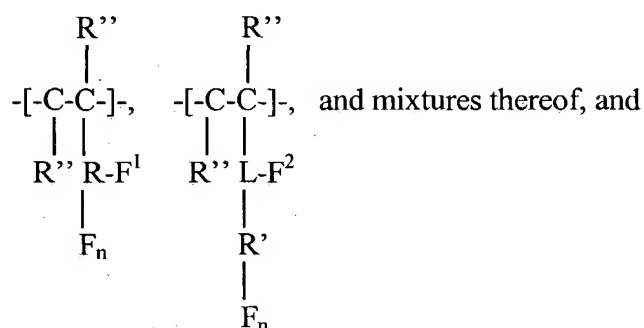
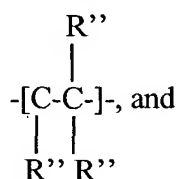


We claim:

1. A coating composition comprising a carbamate-functional polymer having a backbone made by addition polymerization, the polymer comprising from at least 66 to 100% by weight, based on the total weight of the carbamate-functional polymer, of one or more repeat units A selected from the group consisting of



from 0 to less than 35% by weight, based on the total weight of the carbamate-functional polymer, of one or more repeat units A' having the structure



the carbamate-functional polymer having an equivalent weight of at least 250 grams of polymer per carbamate group, wherein

R is an at least divalent nonfunctional linking group having from 1 to 60 carbons atoms and from 0 to 20 heteroatoms selected from the group consisting of oxygen, nitrogen, sulfur, phosphorus, and silane, and mixtures thereof,

R' is an at least monovalent nonfunctional linking group having from 1 to 60 carbons atoms and from 0 to 20 heteroatoms selected from the group consisting of oxygen, nitrogen, sulfur, phosphorus, and silane, and mixtures thereof,

R'' is H or a monovalent nonfunctional linking group having from 1 to 60 carbons atoms and from 0 to 20 heteroatoms selected from the group consisting of oxygen, nitrogen, sulfur, phosphorus, and silane, and mixtures thereof,

L is a divalent nonfunctional linking group having from 1 to 60 carbons atoms and from 0 to 20 heteroatoms selected from the group consisting of oxygen, nitrogen, sulfur, phosphorus, and silane, and mixtures thereof,

F, F¹ and F² are functional groups selected from the group consisting of primary carbamate groups, beta-hydroxy primary carbamate groups, hydroxyl groups, and mixtures thereof, with the proviso that at least one of F¹ and F² are a primary carbamate group or a beta-hydroxy primary carbamate group, and

5 n is an integer from 0 to 3.

2. The coating composition of claim 1 further comprising a flow additive selected from the group consisting of polyvinyl acrylic copolymers, hydroxyl functional polyether polysiloxanes, halogenated polysiloxanes and mixtures thereof,

10

3. The coating composition of claim 1 further comprising one or more HALS having a molecular weight of at less than 300, most preferable less than 260

4. The coating composition of claim 1 wherein the at least monovalent nonfunctional linking group R' comprises at least one branched alkyl group of a least 5 carbons,

15

5. The coating composition of claim 1 wherein the at least one branched alkyl group has 10 carbons.

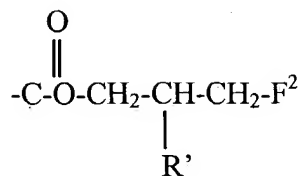
20 6. The coating composition of claim 1 wherein R, R' or R'' comprise one or more groups selected from the group consisting of esters, amides, secondary carbamates, ethers, secondary ureas, ketones, aliphatic groups, cycloaliphatic groups, aromatic groups, and mixtures thereof.

25 7. The coating composition of claim 1 wherein R'' is H.

8. The coating composition of claim 1 comprising less than 20 percent by weight of repeat units A', based on the total weight of the carbamate-functional polymer.

30 9. The coating composition of claim 1 comprising less than 10 percent by weight of one or more repeat units A', based on the total weight of the carbamate-functional polymer.

10. The coating composition of claim 1 comprising from 1.0 to 9.0 percent by weight of one or more repeat units A', based on the total weight of the carbamate-functional polymer.
- 5 11. The coating composition of claim 1 comprising less than 1 percent by weight of one or more repeat units A', based on the total weight of the carbamate-functional polymer.
- 10 12. The coating composition of claim 1 wherein the polymer has an equivalent weight is from 300 to 550 grams of polymer per primary carbamate group.
13. The coating composition of claim 12 wherein the polymer has an equivalent weight of from 350 to 450 grams of polymer per primary carbamate group.
- 15 14. The coating composition of claim 1 wherein one or more of R, R', or R'' are the reaction product of a functional group of a monomer A and a compound B having at least one functional group (b1) reactive with the functional group of monomer A.
- 20 15. The coating composition of claim 1 wherein compound B further comprises an additional functional group selected from the group consisting of hydroxy groups, carbamate groups, groups convertible to hydroxy groups, and groups convertible to carbamate groups.
- 25 16. The coating composition of claim 14 wherein one or more of R, R', or R'' are the reaction product of an acrylic acid group and a glycidyl group containing monomer.
17. The coating composition of claim 1 wherein
- 30 R is an alkyl ester group,
R' is a branched alkyl ester group of from 1 to 15 carbons,
R'' is selected from the group consisting of hydrogen, aromatic groups, alkyl groups of from 1 to 10 carbons, and mixtures thereof,
L is selected from the group consisting of



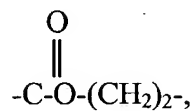
and isomers thereof,

F, F¹ and F² are selected from the group consisting of hydroxyl and primary carbamate, and

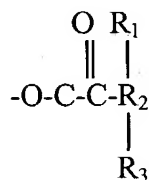
n is 0.

18. The coating composition of claim 17 wherein

R is



R' is



and R₁, R₂, and R₃ are alkyl groups of from 1 to 10 carbons.

19. The coating composition of claim 18 wherein more than 50% of F¹ are primary carbamate groups and more than 50% of F² are hydroxyl groups.